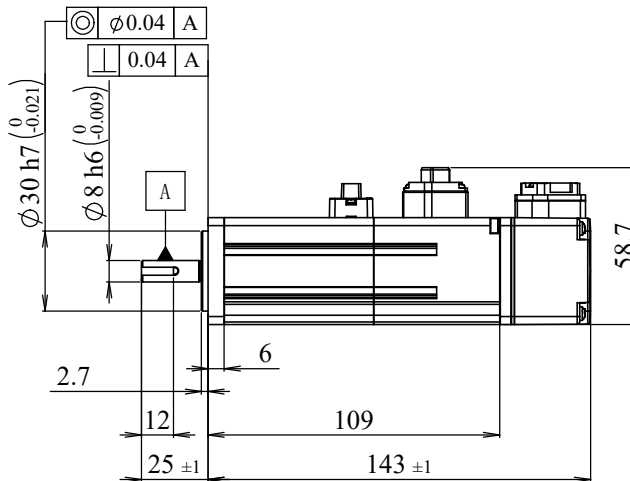


Motor Specifications

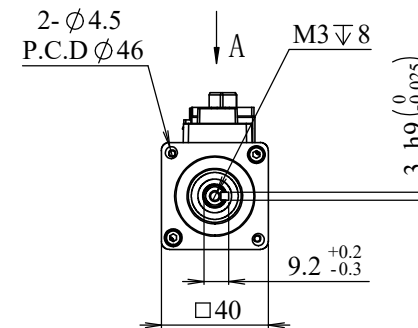
1	Drive Input from Power Supply	V (DC)	208~240VAC
2	Basic DC Bus Voltage	V (DC)	320V
3	Rated Output Power	Watts	100
4	Rated Speed	rpm	3000
5	Max. Mechanical Speed	rpm	6000
6	Rated Torque	Nm	0.32
7	Continuous Stall Torque	Nm	0.33
8	Peak Torque	Nm	1.28
9	Rated Current	A (rms)	1.2
10	Continuous Stall Current	A (rms)	1.2
11	Peak Current	A (rms)	5.9
12	Voltage Constant ±10%	V(rms)/K rpm	16.8
13	Torque Constant ±10%	Nm/A(rms)	0.267
14	Winding Resistance(Line-Line)±10%	Ohm @20°C	11.1
15	Winding Inductance(Line-Line)±20%	mH	15.6
16	Inertia	kg m ²	0.0000409
17	Thermal Resistance(mounted)	°C / W	1.63
18	Thermal Time Constant	Minutes	7 Min
19	Heat Sink Size(Iron)	mm	200×200×6
20	Shaft Load - Axial	N (max.)	50 N / 11 Lbf
21	Shaft Load - Radial(End of Shaft)	N (max.)	60N / 13.5 Lbf
22	Weight	kg	0.8 kg /1.76 Lb
23	Approvals	cULus,CE,RoHS	
24	Encoder	17 bit,Battery-less Absolute Multi-turn Encoder(Fraba)	
25	Insulation Class	F (155°C)	
26	IP rating	IP65(except shaft through hole and cable end connector)	
27	Installation Location	Indoors, free from direct sunlight, corrosive gas, inflammable gas	
28	Ambient Temperature	Operating 0 to 40°C, Storage -20 to 80°C	
29	Ambient Humidity (max.)	85% (free from condensing)	
30	Altitude (max.)	1000 m	
31	Vibration Resistance	49 m/s ²	
32	Rotor Poles	10	

Shaft Load: (L10 life, 20,000 hours, 2,000 RPM)



View A

Motor Power Connector:
DGFA4S-A2-00A(H)



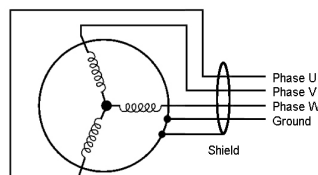
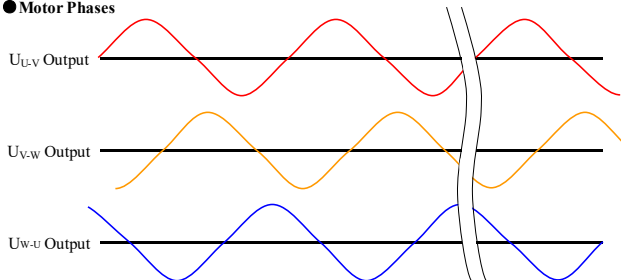
View A

Brake Connector:
DGFAA2S-A1-00A(H)

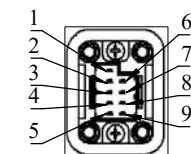
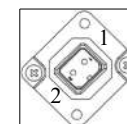
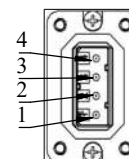
View A

Encoder Connector:
DGFA9S-A1-02A(H)
Pin: DGFA-02A(H)

Motor Phases



All the timing logics are obtained in CCW rotation as viewed from front shaft.



PIN#	Signal	PIN#	Signal	PIN#	1	2	3	4	5	6	7	8	9
1	FG	1	+24V	Signal	Shield	CLK+	CLK-	Data-	Data+	5V	n/c	GND	n/c
2	Phase U	2	0										
3	Phase V	Static Friction Torque											
4	Phase W												

Notes:

1. A shaft seal is shipped with motor, but not installed.
2. A KEY is shipped with motor, but not installed.

Item Number
S0031

Unit: mm
First Angle Method

Tolerances for linear and angular dimensions without individual tolerance indications
GB/T 1804-m eqv ISO 2768-1:m

Geometrical tolerance for features without individual tolerance indications
GB/T 1184-K eqv ISO 2768-2:K

UNLESS OTHERWISE SPECIFIED

AO					
REV	Sign	Quantity	Preliminary	2023.06.13	
			ECN NO.	Date	
Design			Technology		
Standard			Audit		
Check			Approve		
Marketing Dep	<input type="checkbox"/>		Date		



SM3L-042ABBDV
4611170000740

Stage	Quality	Scale
D		1:2
Sheet		1 of 1

Shanghai AMP & MOONS' Automation Co., Ltd